

WHAT IS CLAIMED IS:

1. An image pickup apparatus comprising:

an image pickup area having a plurality of pixels;

first read means for reading signals of pixels

5 contained in a first image pickup area in said image pickup area, through addition of  $n$  ( $n$  is a natural number) pixels; and

second read means for reading signals of pixels

10 contained in a second image pickup area smaller than the first image pickup area, through addition of  $m$  ( $m < n$ ,  $m$  is a natural number) pixels or without addition.

2. An image pickup apparatus according to claim

1, wherein said image pickup area includes a common

15 output unit to which signals of a plurality of pixels are read and output sequentially, said first read means reads signals through addition of  $n$  pixels to the common output unit, and said second read means reads signals through addition of  $m$  pixels or without  
20 addition to the common output unit.

3. An image pickup apparatus according to claim

2, wherein said first read means performs addition of  $n$  pixels in the common output unit.

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4. An image pickup apparatus according to claim

1, further comprising:

analog/digital conversion means for converting a signal read from said image pickup area into a digital signal,

5 wherein said image pickup area includes a common output unit to which signals of a plurality of pixels are read out sequentially and whose output is supplied sequentially to said analog/digital conversion means,

10 wherein said first read means reads out digital signals converted by said analog/digital conversion means through addition of n pixels, and

wherein said second read means reads out digital signals converted by said analog/digital conversion means through addition of m pixels or without addition.

15 5. An image pickup apparatus according to claim 1, further comprising image data processing means for processing signals read by said first read means and signals read by said second read means by using a same processing unit.

20 6. An image pickup apparatus according to claim 1, wherein the number of signals read by said first read means is approximately equal to the number of signals read by said second read means.

25 7. An image pickup apparatus according to claim 1, further comprising control means for storing an

exposure evaluation value and a focus evaluation value  
for said image pickup area and using the exposure  
evaluation value and the focus evaluation value for an  
exposure control and a focus control in accordance with  
5 designation of either said first read <sup>(means)</sup> or said  
second read means and/or in accordance with designation  
of a read area of the plurality of image pickup areas.

8. An image pickup apparatus according to claim  
10 1, further comprising:

a lens for focussing light upon said image pickup  
area; and

image data processing means for forming a  
luminance signal and color signals by processing  
15 signals read from said image pickup area.

9. An image pickup apparatus comprising:

an image pickup area including pixels arranged in  
horizontal and vertical directions, vertical output  
20 lines to which signals of pixels are read out and a  
horizontal output line to which signals from the  
vertical output lines are read out; and

a driver circuit for controlling transistors in  
said image pickup area so that signals of pixels  
25 contained in a first image pickup area in said image  
pickup area are read out through addition of  $n$  ( $n$  is a  
natural number) pixels to the horizontal output line

and signals of pixels contained in a second image pickup area smaller than the first image pickup area are read out through addition of  $m$  ( $m < n$ ,  $m$  is a natural number) pixels or without addition to the horizontal output line.

10. An image pickup apparatus comprising:  
an image pickup area including a plurality of pixels;

10 an analog/digital converter circuit for converting a signal read out from said image pickup area into a digital signal; and

a processing circuit for processing digital signals which are output from said analog/digital converter circuit and correspond to pixels contained in a first image pickup area in said image pickup area, through addition of  $n$  ( $n$  is a natural number) pixels and processing digital signals of pixels contained in a second image pickup area smaller than the first image pickup area through addition of  $m$  ( $m < n$ ,  $m$  is a natural number) pixels or without addition.

11. A method of controlling an image pickup apparatus, comprising the steps of:

25 reading signals of pixels contained in a first image pickup area in an image pickup area having a plurality of pixels, through addition of  $n$  ( $n$  is a

[illegible]

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